# ATTACHMENT B

# CITY OF SANTA MONICA HISTORIC PRODUCTION

																	•												
America	2000	1899	1998	1997	1996	1995	1994	1993	1992	1991	0561	S B B	800	3 2	1007	1096	1095	1984	1983 2883	1982	1981 1981	1980	1979	1978	1977	9/81	1010	1075	YEAR
18.086			14,061	14,689	15,042	14,417	14,400	15,567	13,473	12,997	200,01	10,733	10,020	1000	18.371	19 762	16.386	17,764	16,96	17,198	17,251	16,292	14,799	14,758	14,440	17,131	87.020	16 029	TOTAL DEMAND Acre-
8 5 5 1		ı	11,418	12,068	9,274	4,380	4,952	6,148	5,513	7.404	1,203	20,013	10,847	0 101	9 A A S	9 242	7.695	8,404	8,275	9,836	11,429	10,482	9,254	10,543	7,100	9,701	0 70.7	9.204	MWD Acre- 4 Feet
7.239			5,327	6,/00	6,70	0,468	0,480	7,000	0,000	0,048	1,001	7.661	9 440	A 382	8.267	8.443	7,374	7,994	7,628	7,740	7,763	7,331	6,860	0,041	0,00	201	7 700	7.618	MWD Acre 45 % of Demand Feet Acre-Feet
				•	2,000	0,520	0,000	5 CO 5	9,400	4,100 4,100	4 799	4 737	7,093	7.389	5,382	5,446	5,428	4,990	3,852	SHP'C	4,063	2,420	1,021	- 001	4 004	7.75.A	4.319	5,175	Net Chamock Basin Extraction
	In A I Car	#DIVIOR #DIVIOR	#25.50 60.50	2 2	2	£ 1	448	4182	404	App	37%	28%	38%	46%	46%	37%	33%	37%	36%	32%	<u>د</u> د	30%	A00	2007	37.6	37%	31%	33%	NET CHARNOCK PERCENT OF DEMAND (EXCLUDES AMOUNTS INJECTED)
			, ,					•		•		•	•					•	•		•			, ,	•		•	85	
		. 1		t			,	ŧ	•.			•	,	934	1,248	678	586	1,216	888	9 4	3,4		3 6	788	200	- 65 -	96 <b>7</b>	1,043	сн-9 сн-12
		1			. :		1.457	1.55	1.787	1.543	1,114	576	1,252	982	850	842	1,835	1,847	000	1,52	10,4	37076	1 573	32	118	2.275	2,234	1,761	CH-13
					•				•					•					•	,					•	1,306	295	315	CH-14
					• ;	<u> </u>	1.17	1	Si.	1,39	97	1,24	1.62	1.46	1,836	85	١,	1,177	,		1 226	1987	163	45	1 22	119	1552	2,296	СН-15
				•		•				-								1,580					•		•	,			CH-16
		,	ŧ															1 2 2		,	•	•	•				•		CH-18
						_	_	657	-	•		•	•		,	•	•			1		•							유-4 <u>6</u>
		•				-					4,788	4,737	7,093	8,164	7,510	0,000	2,420	5 A 20	A 188	7 T	5 150	5.336	4.353	3,554	3,236	5,354	750,0	5,4/3	CH-16 CH-18 CH-19 CHARNOCK
		#DV/OH	ED/AIGH	0%	88	16%	44%	41%	40%	48%	37%	28%	35	44%	4678	140/ 140/	250	70E.E	35.8	37%	30%	38%	27%	24%	22%	37%	<b>6</b> .67	3278	CHARNOCK PERCENT OF DEMAND

Laurie Williams, Esq. August 26, 1999 Page 3

		-	Recent	Produ	ection )	History	ia Wate y – Cha	rnock	Wells	9 and	10		
+ r + 454 - r + r + 4 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9	Jan	Feb	Mar	Apr	May	Jun: 13	transport   control to the control t	Aug	Sept	Dct	Nov	Dec	Total
1990	0	.3	0	2	1.	.3	.1	.2	1.4	7.4	8.4	0	18.4
1991	.4	1.1	.4	4.5	7.7	46.1	45.5	41	41.2	39	30.4	31.5	289
1992	7.7	1.9	.5	.3	1.7	.3	.8	1.4	.8	.7	3.8	0	19.9
1993	0	0	0	0	0	0	0	0	3.9	.6	.5	0	5
1994	.2	2.2	7.5	0	7.5	17.6	24.3	17.1	12.8	9.9	7.7	31.4	138
1995	24.5	26.1	34.3	33.5	34	83.9	18.3	61.3	78.5	59.8	59.4	63.1	577
1996	75.3	47.2	58.6	54	56.3	54	113.3	55.7	68.1	7.9	.3	0	591

# ATTACHMENT C

## Cost of Alternative Water For Santa Monica Resulting From MTBE Contamination

Metropolitan Water District of Southern California (MWD)				
		Monthly		Annual
Monthly Average Readiness To Serve Charge Prior to MTBE Impact <sup>1</sup>	\$	14,777.14	\$	177,325.68
Monthly Average Readiness To Serve Charge After MTBE Impact <sup>2</sup>		22,070.50		264,846.00
Incremental Cost	\$	7,293.36	\$	87,520.32
incremental cost	Φ	1,293.30	Ψ	67,520.52
Santa Monica Average Demand (Acre-Feet)		1,206		14,475
Incremental Readiness to Serve Charge Per Acre-Foot based on total				
	\$	6.05		
MWD Water Purchased (Annual Average of 14, 475 Acre-Feet)	φ	0.03		
Incremental Readiness to Serve Charge Per Acre-foot based on 6,500				
Acre-Feet Replacement Water	\$	13.46		
MWD Water Treated Water Cost Per Acre-Foot	<u>\$</u>	431.00		
Total Incremental Cost of MWD Water Per Acre-Foot	S	444.46		
Total incremental bost of mitto trater for Abic 1 bot	•	-1.11.10		
Operations Costs due to Chloramines in MWD Water				
Weekly Manual Chlorination Riviera Reservoir			_	
12 Manhours Per Week or 624 Man Hours Per Year @ \$44.32/Hour			\$	
2 Hours Per Week or 104 Hours Per Year Analytical @ 48.70/Hour			\$	•
Calcium Hypochlorite: 135 Pounds Per Week or 7,020 Pounds Per Year			<u>\$</u>	11,583.00
Sub-Total Chlorination Per Year			\$	44,303.48
		•		
Riviera Reservoir Modifications				
Modify Existing Inlet Structure			\$	206,400.00
Flow Proportioning Gas Chlorinator			\$	
				41,800.00
Recirculation Pumping System				281,200.00
Sub-Total Riviera Modifications			4	261,200.00
Well Maintenance Sampling/Analyses (Per Year)			\$	13,800.00
Well Maintenace (Video Inspection, Redevelopment)			\$	130,000.00
Sub-Total Well Maintenance				143,800.00
Oub-fold from maintonance			•	
Summan/				
Summary			S	444.46
Cost of MWD Water Per Acre-Foot		•	Č	44,303.48
Annual Maintenance Costs (Riviera Reservoir)			4	143,800.00
Annual Maintenance Costs (Production Wells)				•
Capital Cost Riviera Modifications			\$	281,200.00
Notes: <sup>1</sup> Based on the Average Readiness to Serve Charge incurred on 1996				

<sup>2</sup> Based on Current Readiness to Serve Charge

STANLEY C. HATCH GERALD B. PARENT S. TIMOTHY BUYNAK SUSAN P. PETROVICH PETER N. BROWN STANLEY M. RODEN ECOTT S. BLATER STEVEN A. AMERIKANER GARY M. KVISTAD CHRISTOPHER A. JACOSS JEFFREY A. DINKIN JEFFERY H. SPEICH LORI LEWIS PERRY ROBERT J. SAPERSTEIN JEANNE M. MACCALDEN JOSEF D. HOUSKA SARAH J. KNECHT STEPHANIC C. OSLER BRADLEY E. LUNDGREN MERRILEE A. FELLOWS PEBORAN L. MARTIN KRISTEN T. DERSCHEID JOHN D. BAKKER MICHELLE L. PICKETT SECURANA BIVART MARK A. DEPACO ROBIN L. LEWIS SCOTT M. WEIS C. ANTHONY BOYD

LAW OFFICES

## HATCH AND PARENT

A PROFESSIONAL CORPORATION 21 EAST CARRILLO STREET Santa Barbara, California 93101-2782

ALL MAIL: POST OFFICE DRAWER 720 SANTA BARBARA, CALIFORNIA 93102-0720

> TELEPHONE: (805) 963-7000 FACSIMILE: (805) 865-4333

> > August 26, 1999

SAN DIEGO OFFICE NO WEST C STREET, SUITE 2200 SAN DIEGO, CA BZIOI TELEPHONE: (\$18) 702-6100

SOUTH LAKE TAHOE OFFICE THE BUMMIT BOUTH LAKE TAHOE CA DEISO TELEPHONE: (\$30) 542-7800

KEVIN J. NEESE

OF COUNSEL CHRIS FRAHM

DUR FILE #

6774.50 DIRECT DIAL &

INTERNET:

(805) 882-1417 RSaperstein

@HatchParent.com

#### Via Facsimile

Laurie Williams, Esq. Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105

> Charnock Replacement Water Administrative Order RE:

Dear Ms. Williams:

In response to your request, I am providing information relevant to the Replacement Water Order on behalf of Southern California Water Company (SCWC).

First, attached to this correspondence is a table summarizing SCWC's recent production history from the Charnock Sub-basin. As the table shows, the full year production for 1995 was

Second, given the current cost of replacement water and SCWC's estimated production costs, the net cost per acre foot of replacement water based on an annual reimbursement of 577 acre feet, is \$457.00.

This per acre foot cost is based on the following calculation. By way of background, SCWC purchases its replacement water through the West Basin Municipal Water District (West Basin). West Basin is a Metropolitan Water District of Southern California (MWD) member agency that wholesales MWD water to its customers, one of whom is SCWC. SCWC is billed by West Basin monthly.

SB 214231 v 1:06774.0050

Laurie Williams, Esq. August 26, 1999 Page 2

West Basin (really MWD) charges are separated into meter capacity (fixed charge) and quantity charges (commodity charge). The meter capacity charge has remained constant since 1996 at \$70 per cfs. Based on SCWC's average annual purchases from West Basin, the fixed charged pro-rates to approximately \$4.00 per acre foot. The commodity charge is currently at \$528 per acre foot for 1999. Thus, the gross West Basin per acre foot charge is currently \$532. West Basin typically adjusts its rates annually.

SCWC's current estimated production cost is approximately \$75 per acre foot. These production costs primarily include electricity and chemical costs. The current net cost of replacement water is \$457.00 per acre foot. This cost may change depending on West Basin's water rates and the estimated production costs for SCWC.

Finally, reimbursement payment should be paid directly to SCWC at the following address:

Southern California Water Company Region Vice President, Region II 1920 West Corporate Water Anaheim, California 92801

If you have any questions, please give me a call.

Best regards

ROBERT J. SAPERSTEIN For HATCH AND PARENT

ROB/gml

cc: Denise Kruger

Laurie Williams, Esq. August 26, 1999 Page 3

	1 1 1 MM 11 W	-	Recen	t Prodi	uction	Histor	ia Wat y – Cha	rnock	Walle	9 and	10		
20 m) ** ********************************	Jan	Feb	Mar	Apr	May	Jun	Pinton Parant	Aug	Sept	Dct	Nov	December	772651
-1990:	0	.3	0	.2	1.	.3	.1	.2	1.4	7.4	8.4	0	18.4
1991	.4	1.1	.4	4.5	7.7	46.1	45.5	41	41.2	39	30.4	31.5	289
1992	7.7	1.9	.5	.3 ·	1.7	.3	.8	1.4	.8	.7	3.8	0	19.9
1993 .	0	0	o o	0	0	0	0	0	3.9	.6	-5	0	
1994	.2	2.2	7.5	0	7.5	17.6	24.3	17.1	12.8	9.9	7.7		5
1995	24.5	26.1	34.3	33.5	34	83.9	18.3	61.3	78.5	<b>5</b> 9.8	59.4	31.4	138
1996	75.3	47.2	58.6	54	56.3	54	113,3	55.7	68.1	7.9	.3	63.1	577 591

# ATTACHMENT D

8TH DOCUMENT of Level 1 printed in FULL format.

\*\*\* THIS DATA IS FOR INFORMATION PURPOSES ONLY. CERTIFICATION CAN ONLY BE CETAINED THROUGH THE OFFICE OF THE CALIFORNIA SECRETARY OF STATE. \*\*\*

CALIFORNIA SECRETARY OF STATE, CORPORATE RECORD.

! AME: SHELL OIL COMPANY

TYPE OF CORPORATION: STATEMENT AND DESIGNATION BY FOREIGN CORPORATION

CORPORATE STATUS: ACTIVE

TATE OF INCORPORATION/QUALIFICATION: 09/30/1949

"AILING ADDRESS: PO BOX 2463

HOUSTON, TX 77252

STATE OF INCORPORATION: DELAWARE

FEGISTERED AGENT: C T CORPORATION SYSTEM

FEGISTERED OFFICE: 818 WEST SEVENTH STREET

LOS ANGELES, CA 90017

PRESIDENT: J E LITTLE

910 LOUISIANA

HOUSTON, TX 77002

CTATEMENT OF OFFICERS FILE NUMBER: 436977

. TATEMENT OF OFFICERS FILE DATE: 10/05/98

' AX-BASIS: STOCK

CORPORATE NUMBER: 239401

PISTORY:

DATE: 04/27/1953

TRANSACTION: AMENDED STATEMENT AND DESIGNATION BY FOREIGN CORPORATION

DATE: 04/30/1954

TRANSACTION: AMENDED STATEMENT AND DESIGNATION BY FOREIGN CORPORATION

DATE: 01/10/1956

, TRANSACTION: MERGER

COMMENT: MERGED IN SHELL AMERICAN PETROLEUM COMPANY

OTHER CORP NO: 60042855

WALL LEXIS DOCUMENT SERVICES FOR ALL YOUR CORPORATE NEEDS. 800-634-9738

1ST DOCUMENT of Level 1 printed in FULL format.

\*\*\* THIS DATA IS FOR INFORMATION PURPOSES ONLY. CERTIFICATION CAN ONLY BE OBTAINED THROUGH THE OFFICE OF THE CALIFORNIA SECRETARY OF STATE. \*\*\*

CALIFORNIA SECRETARY OF STATE, CORPORATE RECORD.

NAME: SHELL OIL PRODUCTS COMPANY

TYPE OF CORPORATION: STATEMENT AND DESIGNATION BY FOREIGN CORPORATION

CORPORATE STATUS: ACTIVE

DATE OF INCORPORATION/QUALIFICATION: 03/01/1995

MAILING ADDRESS: POB 2463

HOUSTON, TX 77252

STATE OF INCORPORATION: DE

REGISTERED AGENT: THE PRENTICE-HALL CORPORATION SYSTEM, INC.

REGISTERED OFFICE: 2730 GATEWAY OAKS DR., SUITE 100

SACRAMENTO, CA 95833

PRESIDENT: C E DUNAGAN

910 LOUISIANA

HOUSTON, TX 77002

STATEMENT OF OFFICERS FILE NUMBER: 101248

STATEMENT OF OFFICERS FILE DATE: 04/07/1999

TAX-BASIS: STOCK

CORPORATE NUMBER: 1929290

HISTORY:

DATE:

05/04/1998

TRANSACTION: CERTIFICATE OF AMENDMENT

AMENDMENT - FILE REVIEWED BY SOS (NO CERT.AVIALABLE)

CALL LEXIS DOCUMENT SERVICES FOR ALL YOUR CORPORATE NEEDS. 800-634-9738

#### 4TH DOCUMENT of Level 1 printed in FULL format.

## CALIFORNIA STATE BOARD OF EQUALIZATION, SALES AND USE TAX INFORMATION

FIFM-NAME: EQUILON ENTERPRISES LLC

OWITER-NAME: EQUILON ENTERPRISES LLC

TYPE OF OWNERSHIP: LIMITED LIABILITY COMPANY

BUSINESS-ADDRESS: 1100 LOUISIANA HOUSTON

MAILING-ADDRESS: P.O. BOX 4525

HOUSTON, TX 77210

COUNTY: STATEWIDE

START-DATE: 07/1998

NUMBER: 0H972553730000

TYPE-OF-BUSINESS: SERVICE STATIONS

TAY-PROGRAM: CONSOLIDATED - SPECIAL SELLERS

# ATTACHMENT E



Legal Department Kathleen C. Gillmore

January 21, 1999

Laurie Williams, Esq.
US Environmental Protection Agency
Region IX
75 Hawthorne Lane
San Francisco, CA 94105

Jorge Leon, Esq.
State Water Resources Control Board
Office of Chief Counsel
901 P Street
Sacramento, CA 95814

RE: Charnock Sub-Basin MTBE Investigation

Site No. 40, Shell Service Station 3500 Centinela Ave. @ Palms Los Angeles, CA

Site No. 1002, Shell Pipeline Culver City and Los Angeles, CA

Site No. 11, Shell Service Station #204-1994-0100 3801 Sepulveda Blvd., Culver City, CA

Site No. 18, Shell Service Station 10815 National Blvd., Los Angeles, CA

Dear Ms. Williams and Mr. Leon:

This letter will provide you with an updated list of contacts for the above-referenced sites. I apologize for any misunderstanding there may have been about this matter.

Shell Oil Company ("Shell") transferred facilities Site Nos. 40, 11 and 18 to a Shell-Texaco joint venture, Equilon Enterprises LLC, ("Equilon") a Delaware limited liability company, in January 1998. Because Equilon continues to market gasoline and other petroleum products under the Shell and Texaco brand names, you continue to see the name "Shell" at these Equilon facilities. The pipeline ownership will transfer from Shell California Pipeline Company to Equilon California Pipeline Company LLC once approval from the California PUC is obtained. This approval is pending. The pipeline, however, is currently operated by Equilon Pipeline Company LLC.

My new employer, Equiva Services LLC, provides administrative support for Equilon including such services as legal, safety, health and environment and public affairs.

Charnock Sub-Basin MTBE Investigation January 21, 1999 Page 2

If there are any questions regarding the following contacts, please do not hesitate to call me as soon as possible.

#### For Equilon:

Corporate:

J.M. Morgan

President and Chief Executive Officer

Equilon Enterprises LLC

1100 Louisiana, Room ELB2274

Houston, Texas 77002

P.O. Box 4453

Houston, Texas 77210-4453

Office #: (713) 277-7100 Fax #: (713) 277-9836

Legal:

Kathleen C. Gillmore

Senior Environmental Counsel

Equiva Services LLC

910 Louisiana, Room OSP1126

Houston, Texas 77002

P.O. Box 4254

Houston, Texas 77210-4254

Office #: (713) 241-5649 Fax #: (713) 241-4081

John Verber, Esq. Burnham & Brown

1901 Harrison Street, 11<sup>th</sup> floor

Oakland, CA 94612

P.O. Box 119

Oakland, CA 94604-0119

Office #: (510) 835-6720 Fax #: (510) 835-6666

Project

Manager:

H. Brad Boschetto Equiva Services LLC 20945 S. Wilmington Ave.

Carson, CA 90810-1039

P.O. Box 6249

Carson, CA 90749-6249

Office #: (310) 816-2074 Fax #: (310) 816-2431

#### For Shell, the current contacts are:

Corporate:

Jack E. Little

P.O. Box 4254 Houston, Texas 77210-4254 (713)241-5649 Office (713)241-4081 Fax

Charnock Sub-Basin MTBE Investigation January 21, 1999 Page 3

President and Chief Executive Officer

Shell Oil Company

910 Louisiana, 45<sup>th</sup> Floor

Houston, Texas 77002

P.O. Box 2463

Houston, Texas 77252-2463

Office #: (713) 241-4301 Fax #: (713) 241-4678

Legal:

Thomas W. Kearns, Esq.

Senior Environmental Counsel

Shell Oil Company

910 Louisiana, 48th Floor

Houston, Texas 77002

P.O. Box 2463

Houston, Texas 77252-2463

Office #: (713) 241-5633 Fax #: (713) 241-5362

Very truly yours,

Kathleen C. Gillmore

Senior Environmental Counsel

Cc:

Joe Lawrence, City of Santa Monica Barry Groveman, Proskauer Rose, LLP

# ATTACHMENT F



## MATERIAL SAFETY DATA SHEET

51,215 PAGE 1 MSDS NUMBER 27367 (4.62 GENERAL MSDS ASSISTANCE 24 HOUR EMERGENCY ASSISTANCE BE SAFE SHELL: 713-241-4819 SHELL: 713-473-9461 CHEMTREC: 800-424-9300 READ OUR PRODUCT SAFETY INFORMATION PEACTIVITY FIRE £3° G - "Z433 MODERATE - 2 FARS IT ON SLIGHT - T HAZARD RATING EXTREME - 4 PRODUCT LABILITY LAW REGUNES 271 Afor acute and chronic health effects refer to the discussion in Section III 71 - 1 71 By 141 E. riel francische in etalen er NAME . SU 2000E(R) (SUPER UNLEADED GASOLINE) PRODUCT | CHEMICAL PETROL NAME CHEMICAL HYDROCARBON FAMILY SHELL 04351 CODE PRODUCT/INGREDIENT SECTION II-A CAS NUMBER PERCENT COMPOSITION ND. MIXTURE 100 SU 2000E (SUPER UNLEADED GASOLINE) BALANCE ALKANES, CYCLDALKANES, A: KENES AND AROMATIC HYDROCARBONS MIXTURE 108-88-3 0-25 2 TOLUENE 0-25 1330-20-7 XYLENE 0-5 71-43-2 BENZENE 0-3 110-54-3 N-HEXANE 1634-04-4 5-11 TERT-BUTYL METHYL ETHER ACUTE TOXICITY DATA SECTION II-B ACUTE INHALATION LC50 ACUTE DERMAL LOSO ACUTE ORAL LOSO ND. >5 MG/L/4HR (RAT) >2 GM/KG (RABBIT) >5 GM/KG (RAT)

SECTION 111

HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BEILD! ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1810.1200)

EYE CONTACT BASED ON PRODUCT TESTING PRODUCT IS MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT
PROLONGED AND REPEATED LIQUID CONTACT CAN CAUSE DEFATTING AND DRYING OF THE SKIN RESULTING IN SKIN
IRRITATION AND DERMATITIS.

INHALATION
THIS PRODUCT MAY CAUSE IRRITATION TO THE NOSE, THROAT AND RESPIRATORY TRACT AND ADDITIONALLY, MAY PRODUCE LIVER AND KIDNEY DAMAGE. HIGH VAPOR CONCENTRATIONS MAY PRODUCE CNS DEPRESSION.

INGESTION
THIS PRODUCT MAY BE HARMFUL OR FATAL IF SWALLOWED. INGESTION OF PRODUCT MAY RESULT IN VOMITING: ASPIRATION (BREATHING) OF VOMITUS INTO THE LUNGS MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY

THE AND SET LIA. WEST DISTRICT

51,215 PAGE

SECTION IV

#### RCR# INFORMATION

UNDER EPA - RCRA (40 CFR 261.21), IF THIS PRODUCT BECOMES A WASTE MATERIAL: IT WOULD BE AN IGNITABLE HAZARDOUS WASTE. HAZARDOUS WASTE NUMBER DOO!. REFER TO LATEST EPA DR STATE REGULATIONS REGARDING PROPER DISPOSAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE DETAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: APRIL 10, 1990

SHELL DIL COMPANY ENVIRONMENTAL AFFAIRS P. 0. BOX 4320 HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL

(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL SHELL: (713) 473-8481 CHEMTREC: (800) 424-8300



## ENVIRONMENTAL DATA SHEET

EDS NUMBER > 51,215

PAGE 1

F 7445 (\$-67)

PRODUCT 5 SU 2000E(R) (SUPER JNLEADED GASOLINE) PRODUCT 04351 CODE

		,									
BECT	FREDUCT/COMPOSITION	PRODUCT/COMPOSITION									
NO.	COMPONENT	CAS NUMBER	PERCENT								
P	SU 2000E (SUPER UNLEADED BASOLINE)	MIXTURE	100								
4	ALKANES, CYCLDALKANES, ALKENES AND AROMATIC HYDROCARBONS	MIXTURE	BALANCE								
خ	TOLUENS	108-88-3	0-25								
2	XYLENE	1330-20-7	0-25								
4	BENZENE	71-43-2	0-5								
-	N-HEXANE	110-54-3	o−3								
₹	TERT-BUTYL METHYL ETHER	1634-04-4	5-11								
2	PSEUDOCUMENE (1.2.4-TRIMETHYLBENZENE)	85-63-6	0-5								
<u>.</u>		110-82-7	0-1								
8	CYCLOHEXANE	100-41-4	C-3								
<u>₽</u> 10	ETHYLBENZENE Naphthalene	91-20-3	0-1								

SECT	ION II	SARA	TITLE III	INFORMATION	
NG.	EHS RQ (LBS)	EHS TPQ (LBS) (=2)	SEC 313 (*3)	313 CATEGORY ("4)	311/312 CATEGORIES
P			YES		H-1, H-2, P-3
3 .4 .			YES Yes		
6 7 8			YES YES YES		
9 10			YES YES		

#5 = MAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H=1 = IMMEDIATE (ACUTE) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD
P-5 = REACTIVE HAZARD

H-2 = DELAYED (CHRONIC) HEALTH HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD

#### ENVIRONMENTAL RELEASE INFORMATION SECTION III

UNDER EPA-CWA. THIS PRODUCT IS CONSIDERED AN DIL UNDER SECTION 311. SPILLS INTO DR LEADING TO SURFACE WATERS THAT CAUSE A SPIEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER. 800-424-8802.

THIS MATERIAL IS COVERED BY CERCLA'S PETROLEUM EXCLUSION. THEREFORE, RELEASES TO AIR, LAND OR WATER ARE NOT REPORTABLE UNDER EPA-CERCLA ("SUPERFUND").

00028

<sup>\*1 =</sup> REPORTABLE QUANTITY OF EXTREMELY MAZARDOUS SUBSTANCE, SEC.302 \*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY MAZARDOUS SUBSTANCE, SEC 302

<sup>\*3 =</sup> TOXIC CHEMICAL, SEC 313
\*4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.65 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM

RESULT IN ASPIRATION PNEUMONITIS.

#### SIGNS AND SYMPTOMS

STORS AND SIMPTOMS

TERITATION AS NOTED ABOVE. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE
EVIDENCED BY GIDDINESS, HEADACHE. DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONCIDUSNESS AND DEATH
VAY OCCUR. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING, LABORED BREATHING AND CYANOSIS
BLUISH SKIN); IN SEVERE CASES DEATH MAY OCCUR. KIDNEY DAMAGE MAY BE EVIDENCED BY CHANGES IN URINE
DUTPUT, URINE APPEARANCE OR EDEMA (SWELLING FROM FLUID RETENTION). LIVER DAMAGE MAY BE EVIDENCED
BY LOSS OF APPETITE, JAUNDICE (YELLOWISH SKIN COLOR) AND SOMETIMES PAIN IN THE UPPER ABDOMEN ON THE RIGHT SIDE.

#### AGGRAVATED MEDICAL CONDITIONS

PREEXISTING EYE. SKIN. AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. IMPAIRED LIVER AND KIDNEY FUNCTION(S) FROM PREEXISTING DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

#### OTHER HEALTH EFFECTS

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS DETERMINED THAT GASOLINE IS POSSIBLY CARCINOGENIC TO HUMANS (GROUP 2B). IT HAS BEEN REPORTED THAT CHRONIC INHALATION EXPOSURE TO AN UNLEADED MOTOR GASOLINE, WHICH WAS FILLY VAPORIZED, HAS PRODUCED KIONEY AND LIVER CANCERS IN SOME LABORATORY RODENTS. THE STUDIES WERT SPONSGRED BY THE AMERICAN PETROLEUM INSTITUTE. THE API TEST MATERIAL USED WAS BLENDED TO REPRESENT A TYPICAL UNLEADED MOTOR GASOLINE. BENZENE IS LISTED BY THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER AND OSHA AS A CHEMICAL GAUSALLY ASSOCIATED WITH CANCER IN HIMANS.

SEE SECTION VI FOR SUPPLEMENTAL INFORMATION.

SECTIO	N IV		OCCUPATIONAL	EXPO:	SURE LIMITS				
ND.	PEL/TWA	OSHA	PEL/CEILING	TLV/1	ACGIH	TLV	STEL	отн	R
p 2 3 4 5	300 PPM 100 PPM 100 PPM 1 PPM 50 PPM				P D M	150	PPM PPM PDM	150 150	PDM= PPM= PPM= PPM=

FOSHA PEL/STEL. FECLASSIFIED BY AGGIH AS A "SUSPECTED HUMAN CARCINDGEN" (A2)

#### EMERGENCY AND FIRST AID PROCEDURES SECTION V

#### EYE CONTACT

FLUSH WITH WATER FOR 15 MINUTES WHIL! HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

FLUSH WITH WATER WHILE REMOVING COUTAMINATED CLOTHING AND SHOES. FOLLOW BY WASHING WITH SOAP AND WATER. DD NOT REUSE CLOTHING OR SHOFS UNTIL CLEANED. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

REMOVE VICTIM TO FRESH AIR AND PROVILE DXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MIDICAL ATTENTION.

DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.

#### NOTE TO PHYSICIAN

\*\*IF MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND VOMITING HAS NOT CCCURRED, EMESIS SHOULD BE INDUCED WITH MEDICAL SUPERVISION. K! EP VICTIM'S HEAD BELOW HIPS TO PREVENT ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEY. CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE USING A CUFFED ENDOTRACHEAL TIBE SHOULD BE CONSIDERED.

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SECTION YI

SUPPLEMENTAL HEALTH INFORMATION

#### INFORMATION ON PRODUCT:

A CHRONIC INHALATION STUDY (REFERENCED IN SECTION 111) SUPPORTED BY THE AMERICAN PETROLEUM INSTITUTE FOUND THAT FULLY VAFORIZED UNLEADED GASOLINE EXPOSURE PRODUCED DOSE-RELATED INCIDENCES OF KIDNEY CANCER IN MALE RATS. GASOLINE EXPOSURE ALSO PRODUCED AN INCREASE OF LIVER CANCER AT THE HIGHEST DOSE (2056 PPM) IN FEWALE MICE. EXPOSURES WERE FOR 6 HRS/DAY. 5 DAYS/WEEK FOR A TOTAL OF 27 MONTHS. THE RELATIONSHIF AND SIGNIFICANCE TO MAN OF THE RESULTS OF THIS STUDY ARE NOT KNOWN.

INHALATION STUDIES ON GASOLINE VAPORS HAVE CAUSED CENTRAL NERVOUS SYSTEM EFFECTS IN DOGS AT 10.000

UNLEADED GASOLINE WAS EVALUATED FOR GENETIC ACTIVITY IN ASSAYS USING MICROBIAL CELLS. CULTURED MAMMALIAN CELLS AND RATS (BONI MARROW). THE RESULTS WERE ALL NEGATIVE. UNLEADED GASOLINE WAS CONSIDERED NON-MUTAGENIC UNDER THESE CONDITIONS.

#### INFORMATION ON GASQLINE CONSTITUENTS:

LABORATORY ANIMALS EXPOSED BY VARIOUS ROUTES TO HIGH DOSES OF XYLENE SHOWED EVIDENCE OF EFFECTS IN THE LIVER, KIDNEYS, LUNGS, SPLEEN, HEART AND ADRENALS, RATS EXPOSED TO XYLENE VAPOR DURING PREGNANCY SHOWED EMBRYO/FETCTCXIC EFFECTS. MICE EXPOSED ORALLY TO DOSES PRODUCING MATERNAL TOXICITY ALSO SHOWED EMBRYO/FETCTOXIC EFFECTS. PROLONGED AND REPEATED EXPOSURES TO HIGH CONCENTRATIONS OF XYLENE HAVE RESULTED IN HEARING LOSS IN LABORATORY RATS.

WHILE THERE IS NO EVIDENCE THAT INDUSTRIALLY ACCEPTABLE LEVELS OF TOLUENE VAPORS (E.G., THE TLV) HAVE PRODUCED CARDIAC EFFECTS IN HUMANS, ANIMAL STUDIES HAVE SHOWN THAT INHALATION OF HIGH LEVELS OF TOLUENE PRODUCED CARDIAC SENSITIZATION. SUCH SENSITIZATION MAY CAUSE FATAL CHANGES IN HEART RHYTHMS. THIS LATTER EFFECT FAS SHOWN TO BE ENHANCED BY PYPOXIA OR THE INJECTION OF ADRENALIN-LIKE AGENTS. PROLONGED AND REPEATED EXPOSURES TO HIGH CONCENTRATIONS OF TOLUENE HAVE RESULTED IN HEARING LOSS IN LABORATORY FATS.

BENZENE IS A CANCER HAZARD. FROLONGED AND REPEATED EXPOSURE MAY CAUSE SERIOUS INJURY TO BLOOD FORMING ORGANS AND IS ASSOCIATED WITH ANEMIA AND CERTAIN FORMS OF LEUKEMIA IN MAN. ANIMAL STUDIES ON BENZENE DEMONSTRATED IMMUNITOXICITY. TESTICULAR EFFECTS AND ALTERATIONS IN REPRODUCTIVE CYCLES. EVIDENCE OF CHROMOSOMAL DAMAGE OR OTHER CHROMOSOMAL CHANGES, AND EMBRYO/FETOTOXICITY BUT NOT TERATOGENICITY.

STUDIES ON N-HEXANE IN LABORATORY ANIMALS HAVE SHOWN MILD, TRANSITORY EFFECTS ON THE SPLEEN AND BLOOD (WHITE BLOOD CELLS). ANE EVIDENCE OF LUNG DAMAGE. IN ADDITION, FETOTOXICITY HAS BEEN DEMONSTRATED AT LEVELS PRODUCING MATERNAL TOXICITY. AT HIGH LEVELS. INHALATION EXPOSURE HAS RESULTED IN TESTICULAR AND EPIDIDYMAL ATROPHY.

INGESTION OF TERT-BUTYL METHYL ETHER (MTBE) INDUCED ONS (CENTRAL NERVOUS SYSTEM) DEPRESSION IN RATS. EXPOSURE TO MTBE VAPOR! PRODUCED EMBRYD/FETDTOXICITY (INCLUDING AN INCREASED INC]DENCE IN CLEFT PALATE AT THE HIGHEST DOSE) IN MICE AT LEVELS PRODUCING MATERNAL TOXICITY. NO SUCH EFFECTS WERE NOTED IN A SIMILAR STUDY IN RABBITS. MTBE TESTED POSITIVE IN THE MOUSE LYMPHOMA ASSAY IN THE PRESENCE OF METABOLIC ACTIVATION.

THE HANDLING PROCEDURES AND SIFETY PRECAUTIONS IN THIS MSDS SHOULD BE FOLLOWED TO MINIMIZE EMPLOYEE EXPOSURE.

#### PHYSICAL DATA

BOILING POINT: 100-425 APPROX

SPECIFIC GRAVITY: 0.72-0.75

VAPOR PRESSURE: 6-14 PSI (REID) (MM HG)

(DEG F)

(H20=1)

VAPOR DENSITY: 3.5

MELTING POINT: NOT AVAILABLE

SOLUBILITY: NEGLIGIBLE

(DEG F)

(IN WATER)

(AIR=1)

EVAPORATION RATE (N-BUTYL ACETATE = 1): NOT AVAILABLE

% VOLATILE BY VOL= 100 (# 415 DEG. F) PRODUCT NAME: SU 2000E(R) (SUPER ' 'EADED GASOLINE)

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APPEARANCE AND ODOR:

RED COLOR: CLEAR AND BRIGHT LIQUID. HYDROCARBON ODDR.

SECTION VIII

FIRE AND EXPLOSION MAZARDS

FLASH POINT AND METHOD:

FLANMABLE LIMITS /% VOLUME IN AIR

-40 DEG F TAG CLOSED TESTER

LOWER: 1.3 UPPER: 7.6

EXTINGUISHING MEDIA

USE WATER FOG. FOAM, DRY CHEMICAL OF CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

DANGER. EXTREMELY FLAMMABLE. CLEAF FIRE AREA OF UNPROTECTED PERSONNEL AND ISOLATE. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL SUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS ARE HEAVIER THAN AIR ACCUMULATING IN LOW AREAS AND TRAVELING ALONG THE GROUND AWAY FROM THE HANDLING SITE. DO NOT WELD, HEAT OR DRILL ON OR NEAR CONTAINER. HOWEVER, IF EMERGENCY SITUATIONS REQUIRE DRILLING, ONLY TRAINED EMERGENCY PERSONNEL SHOULD DRILL.

SECTION IX

REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID: AVOID HEAT, SPARKS, OPEN FLAMES AND STRONG OXIDIZING AGENTS. PREVENT VAPOR ACCUMULATION.

HAZARDOUS DECOMPOSITION PRODUCTS

CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS CAN BE FORMED UPON COMBUSTION.

SECTION X

EMPLOYEE PROTECTION

UNDER CONDITIONS OF POTENTIAL HIGH EXPOSURE, THE USE OF A NIOSH-APPROVED RESPIRATOR IS RECOMMENDED. PER 29 CFR 1910.134 OR 29 CFR 1910.1028 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS. FOR SERVICE STATION PERSONNEL PROTECTION, SEE SECTION XII.

OSHA HAS ESTABLISHED TRANSITIONAL OCCUPATIONAL EXPOSURE LIMITS FOR THIS PRODUCT AND/OR COMPONENTS OF THIS PRODUCT. REFER TO 29 CFR 19'0.1000 FOR THESE TRANSITIONAL LIMITS AND REQUIREMENTS FOR MEETING THESE LIMITS.

PROTECTIVE CLOTHING

AVOID CONTACT WITH EYES. WEAR CHEMICAL GOGGLES IF THERE IS LIKELIHOOD OF CONTACT WITH EYES, TEST DATA FROM PUBLISHED LITERATURE AND OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE BEST PROTECTION IS PROVIDED BY NITRILE RUBBER, POLYVINYL ALCOHOL OR VITON/NEOPRENE.

ADDITIONAL PROTECTIVE MEASURES

USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

SECTION XI

ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES

DANGER. EXTREMELY FLAMMABLE. ELIMINATE ALL IGNITION SOURCES. HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING. \*\*\* LARGE SPILLS \*\*\* ISDLATE THE HAZARD AREA AND DENY ENTRY TO UNNECESSARY PERSONNEL. WEAR APPROPRIATE RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. WITER FOG MAY BE USEFUL IN SUPPRESSING VAPOR CLOUD: CONTAIN RUN-OFF. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS FOR PROPER

00031

PRODUCT NAME: SU 2000E(R) (SUPER UNLEADED GASOLINE)

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DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE: DISPOSE OF FLUSH SOLUTIONS AS ABOVE. SMALL SPILLS \*\*\* TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS; SEAL TIGHTLY FOR PROPER DISPOSAL.

SECTION XII

SPECIAL PRECAUTIONS

DANGER. EXTREMELY FLAMMABLE. AVOID HEAT, SPARKS. DPEN FLAMES, INCLUDING PILOT LIGHTS, AND STRONG OXIDIZING AGENTS. USE EXPLOSION-PROOF VENTILATION TO PREVENT VAPOR ACCUMULATION. ALL HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING. HARMFUL OR FATAL IF SWALLDWED. DO NOT SIPHON GASDLINE BY MOUTH.

FOR USE AS A MOTOR FUEL ONLY. DO NOT USE AS A CLEANING SOLVENT OR FOR OTHER NON-MOTOR FUEL USES. WASH WITH SDAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. UNDER NORMAL WORKING CONDITIONS AT SERVICE STATIONS, A RESPIRATOR IS NOT WARRANTED.

IF A MAJOR SPILL OCCURS, GET JPWIND AND NOTIFY LOCAL EMERGENCY PERSONNEL. REMEMBER EXPLOSION AND FIRE IS THE MOST IMMEDIATE DANGER.

SECTION XIII

TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION: FLAMMABLE LIQUID

D.O.T. PROPER SHIPPING NAME:

OTHER REQUIREMENTS:

D.D.T. I.D. #UN 1203, GUIDE NO. 27.

SECTION XIV

OTHER REGULATORY CONTROLS

IN ACCORDANCE WITH SARA TITLE 111, SECTION 313, THE EDS SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV

STATE REGULATORY INFORMATION

PRODUCT NAME: SU 2000E(R) (SUPER "MILEADED GASOLINE)

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THIS INFORMATION IS BEING SYSTEM/TICALLY ADDED TO OUR MSDS. IT HAS PREVIOUSLY BEEN PROVIDED TO YOU IN VARIOUS WAYS, INCLUDING THE MSDS. THE NEW MSDS FGRMAT IS INTENDED TO PROVIDE THE USER WITH THE INFORMATION IN A MORE CONVENIENT MANNER.

SECTION XVI

SPECIAL NOTES

NEW MSDS.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: APRIL 10. 1990

BE SAFE

READ DUR PRODUCT SAFETY INFORMATION ...AND PASS IT ON (PRODUCT LIABILITY LAW REQUIRES IT) J. C. WILLETT

SHELL DIL COMPANY PRODUCT SAFETY AND COMPLIANCE P. D. BOX 4320 HOUSTON, TX 77210

# ATTACHMENT G

### Shell Oil Products Company

P O Box 4848 Ansheim CA 92803

SII North Brookhurst Street Anahom CA 92801

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUNE 25, 1996

Report Spender

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Dr. Robert Ghirelli, Executive Officer California Regional Water Quality Control Board Los Angeles Region 101 Centre Plaza Drive Monterey Park, CA 91754-2156

RE: Methyl Tertiary Butyl Ether (MTBE) Pollution Investigation - City of Santa Monica Charnock Well Field (Your File NO. 96-042)

Dear Dr. Ghirelli:

The following information is furnished in response to your letter on this subject to Ms. Karen Haynes dated May 23, 1996. It responds to the specific information requested by Appendix A to your May 23 letter and provides it in the sequence that information is requested.

#### MTBE INFORMATION

Shell Oil Company SU2000E Gasoline, introduced in the first quarter of 1990, was the first Shell gasoline manufactured, transported or sold in California that contained MTBE. All Shell gasolines manufactured, transported and sold in California contained MTBE after October, 1992. Shell refineries located in Texas and Louisiana intermittently used MTBE to enhance gasoline octane levels beginning in early 1980. It is possible, but very unlikely, that these refineries supplied some tiny percentage of the gasoline Shell marketed in California in the 1980's. (Shell had three refineries located on the West Coast that supplied almost all of Shell's product throughout this period.) In addition, Shell occasionally purchased small amounts of gasoline on the open market to fulfill its needs. Since our purchase specifications did not reference MTBE during the 1980's and early 1990's, it is also possible that some of the purchased gasoline contained MTBE.

Enclosed as Attachment I are two documents authored by Mr. James M. Davidson of Alpine Environmental, Inc., Fort Collins, Colorado. These documents deal specifically with technical aspects associated with the issue of MTBE in ground water. Shell has no information about MTBE of any real significance to the issue of MTBE in ground water that is not adequately addressed in Mr. Davidson's work.

<u>PIPELINE INFORMATION</u> (Shell Pipe Line Corporation)

The Shell Pipe Line Corporation owns and operates the Ventura Products Pipeline located in a right-of-way within Sawtelle Boulevard. This pipeline lies immediately to the east of the Charnock Field as depicted on the sketch that accompanied your May 23 letter. A map showing the location of the sections of the Ventura Products

Pipeline within a two mile radius of the Charnock Field is enclosed as Attachment II. This pipeline has been exclusively owned by the Shell Pipeline Corporation since prior to January 1, 1980, and has transported only Shell gasolines from that date to the present time.

Shell Pipeline Corporation also owns and operates the Ventura Crude Pipeline a small segment of which is located within some one and one-half miles of the Charnock Field. We have not included a map of this pipeline because it has never transported any substance that contains MTBE. The Ventura Crude Pipeline has been exclusively owned and operated by the Shell Pipeline Corporation since prior to January 1, 1980.

Copies of profile drawings for sections of the Ventura Products Pipeline located within two miles of the Charnock field are enclosed as Attachment III. These profile drawings show materials of construction, dates of installation and burial depth. The operational capacity of the segment of the line under discussion is approximately 725 barriels per hour.

No California Pipeline Safety Act hydrostatic tests have indicated that the line leaked. Copies of the tightness certifications for tests performed in 1988 and 1993 are enclosed as Attachment IV. The Ventura Products Pipeline is continuously monitored whenever it is in operation. Pressure readings are compared via computer at intervals of less than 60 seconds. All recorded anomalies are investigated. None were found to be the result product releases.

Our records do not contain any indication of a product release within two miles of the Charnock field nor any indication of contaminated soil along the Ventura Products Pipeline right-of-way. Moreover, discussions with appropriate maintenance and operating personnel responsible for the Ventura Products Pipeline provided no indication of contamination.

Appendix A concludes with a request for a technical report that details an active program to evaluate the length of all petroleum pipelines within two miles of the Charnock Well Field. We believe it is inappropriate to perform any evaluation of the Ventura Crude Pipeline because it has never transported any substance that contains MTBE and because it's closest point is some mile and one-half from the Charnock Field. We will take immediate steps to evaluate the Ventura Products Pipeline. The next California Pipeline Safety Act hydrostatic test of this pipeline is scheduled for 1998. However, we will now make arrangements to perform a California Pipeline Safety Act test of the segment within approximately two miles of the Charnock field during the third quarter of 1996. We will provide you with the results of this test immediately thereafter. Should these test results indicate that further evaluation is warranted, we will then provide a detailed description of our proposed follow-up investigation.

## UNDERGROUND GASOLINE STORAGE TANKS INFORMATION: (Shell Oil Products Company)

There are three operating Shell stations in the list of sites located within the one-mile radius from the Charnock Wellfield. The three Shell stations are at the following locations:

- 1. 3500 Centinela, Los Angeles
- 2. 10815 National, Los Angeles
- 3. 3801 Scpulveda, Culver City

Attachment V contains the summary report addressing the items listed in Appendix A regarding underground gasoline storage tanks.

We believe that the foregoing provides all the information requested by Appendix A. Should you or your staff have any further questions, please contact our Carlton Jordan at (310) 816-2060 for matters related to the Ventura Products Pipeline or Karen Haynes at (714)-520-3395 for matters related to Shell service stations.

Yours truly,

FOR SHELL PIPE LINE CORPORATION:

L. W. Alexander, Manager Environmental and Technical FOR SHELL OIL PRODUCTS COMPANY:

P. J. Pugnale, Manager Engineering, Western Region

TFM KGH